

DECONTAMINATION AND DECOMMISSIONING (D&D) PROGRAM





D&D Experience

The Argonne D&D Projects group is recognized as subject matter experts in various areas through their experiences over the last 25 years in decommissioning research reactors and other nuclear facilities at Argonne National Laboratory and supporting the same work at other sites both domestically and abroad. These areas of expertise include:

- Project Management and Execution including Cost, Schedule, Quality and Technical baseline
- "Path Forward" Planning, Development, Preparation and Review (Decommissioning Plan, Radiation Protection, Characterization Plan, Health & Safety, Quality Assurance Plan).
- · Project Readiness Reviews and Facility Walk-
- Project Health Physics and Industrial Safety Oversight.
- NRC Licensing Activities
- License Termination Process
- Quality Assurance Audits and Assessments
- Decommissioning Training





Experience Base

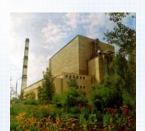
The ANL Nuclear Engineering Division, through its D&D Projects Group, has been leading and supporting the decommissioning of nuclear facilities at ANL and at various other locations within the United States and abroad for over 25 years. The knowledge gained and the lessons learned from this work was applied to subsequent projects and shared with others. Some hands-on decommissioning work was performed using Argonne's in-house labor forces while other projects were performed with contractor work forces. Several projects required a coordinated work effort of both forces. Other efforts focused on analysis of strategies and general planning support.

Decommissioning Projects

Argonne research facilities decommissioned include:

- Experimental Boiling Water Reactor
- Chicago Pile 5 Research Reactor
- JANUS Biological Reactor Facility
- Argonne Thermal Source Reactor
- Building 212 Plutonium Gloveboxes 60-Inch Cyclotron Facility
- Building 200 M-Wing Hot Cells (decontaminated for safe storage)
- Building 301 Hot Cells (characterized awaiting funding)
- Experimental Breeder Reactor-II (placed in safe storage)
- Small-scale D&D projects

International Technical Support



Kazakhstan - BN-350 Fast Reactor



Latvia - IRT Research Reactor



Hanford N Reactor





LANL - CMR Facility



Tokamak Fusion Test Reactor at PPPL

The D&D Project Group has been conducting D&D training for over eight years. More than 25 in-depth training courses (ranging in length from 1-2 days to 3weeks) have been conducted for national and international trainees on the decommissioning of nuclear facilities. The courses have focused on various types of contaminated facilities - power reactors, research reactors, hot cells, glovebox facilities, production reactors, waste management facilities, and other nonnuclear facilities. To date, over 750 participants from over 40 countries have participated in these training courses. The training course has been given at various U.S and international locations and at customer's sites.





D&D Support to Outside Customers

The Argonne D&D Projects Group has been providing technical support to various DOE organizations, including:

- Tokomak Fusion Test Reactor at Princeton Plasma Physics Laboratory,
- Los Alamos National Laboratory,
- Brookhaven National Laboratory,
- · Savannah River Site.
- Mound Site.
- Battelle Columbus Laboratories,
- · Hanford N Reactor, and
- · West Valley Demonstration Project.

Additionally, the Argonne D&D Projects Group provides technical support to various non-DOE organizations, including:

- the International Atomic Energy Agency,
- the OECD/NEA Technical Advisory Group on Decommissioning, and
- the U.S. Army Aberdeen Fast Pulsed Reactor Facility.

Also worth noting, a team of ANL D&D subject matter experts have been assigned to the decommissioning of the NASA Plum Brook Research Reactor Facility for over 5 years, providing direct technical support to NASA in the areas of construction management, radiation safety, licensing and quality assurance oversight, and industrial safety.



The Plum Brook Research Reactor Facility in the late 1960's







Scenes of decommissioning work in progress at PBRR

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